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EXAMINER

STEELMAN, MARY J

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/472,290

Applicant(s)

PATEL ET AL.

Examiner

Mary J. Steelman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action is in response to Amendment filed 25 June 2004.
2. As per Applicant's request, claims 1, 5, 9, 10, 11, and 14 have been amended. Claims 1-20 are pending.

#### *Claim Objections*

3. Claim 11 is objected to as having an incorrect deletion. "detected" is deleted in the currently amended claim. However, "detected" was not previously used in the claim.

#### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-4, 11-13, and 19- 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,178,225 to Zur et al, in view of U. S. Patent 6,094,531 to Allison et al., in further view of US Patent 6,321,348 B1 to Kobata.

Zur teaches a system for management of multiple imaging services within a networked system (Zur, Fig. 1) which could be part of a (Zur, col. 4, line 38) Picture Archiving and Communication System (PACS). The imaging facility has (Zur, col. 4, lines 53-54) "internet

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connectivity...via a network connection.” (establishing a network connection with a web-based server) where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). (Allison, fig. 1 and col. 4, lines 43-48) “The installer (1) of the present invention is capable of configuring several machines (3) and installing operating systems (periodically providing software for installation) on them...simultaneously...over network...Internet.” The server is directed to install: (Allison, col. 11, line 45), “When the installer (1) receives a request from a dispatcher (17) to install...” and the (Allison, col. 11, lines 61-65) “...installer (1) calls the installation script...The script then causes the OS to be installed on the selected test machine...” Besides installing operating systems, other software may be installed (updates), (col. 12, line 32) “...the launcher (18) installs the test software...”

**Regarding claim 1, Zur disclosed:**

- establishing a network connection with a web-based server; (Zur, fig. 1, “network connection” and col. 2, line 51, “...communicate via an Internet communication technology...”.)
- a plurality of picture archiving and communication system workstation. ( Zur, col. 4, lines 37-38, Picture Archiving and Communication System (PACS).”)

Zur failed to provide details on simultaneous installations of software on the remote workstations. However Allison disclosed:

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-providing software for installation; (Allison, col. 5, lines 42-43, "...installer is provided with the name of the ...revision (software) to be installed.")

-directing the web-based server to simultaneously install the software to a plurality of picture archiving and communication system workstations in communication with the web-based server; (Allison, Col. 4, lines 43-46, "The installer...is capable of...installing...simultaneously.")

-simultaneously installing software to the plurality of picture archiving and communication system workstations. (Allison, col. 4, lines 43-46.)

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to modify the networked Picture Archiving Communication System units as taught by Zur, by permitting the networked system to allow for simultaneous installations of software to the PACS workstations, as taught by Allison, because PACS is a cost effective solution to image processing, PACS is already networked, and (Allison, col. 1, lines 14-41) disclosed methods that make it suitable for simultaneous generic installation on a plurality of networked computers (workstations/ terminals) while minimizing human intervention and the likelihood of errors.

Neither Zur, nor Allison discloses "in response to an error detected by at least one workstation"... "reporting the error to the web-based server".

However, Kobata disclosed a client / server Internet based application with a (Abstract, lines 1-10) system provided to detect the infrastructure at the client side...to automatically transmit required software to the client ...to remotely identify problems (detect errors)...to install new software..." Kobata disclosed (col. 2, lines 42-51), "...infrastructure data is sensed at

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the client side and reported to the server periodically (reporting the error to the web-based server)...The artificial intelligence system at the server side can filter the incoming data so as to be able to ascertain what problems, if any exist...to provide corrective action through the automatic transmission of new software over the Internet to the client."

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur's Picture Archiving Communication workstation environment to include the simultaneous installation as provided by Allison, and further to provide that the update installation in response to an error condition being remotely identified, as disclosed by Kobata. This is well known in the art. Monitoring remote workstations for error corrections and correcting remotely is an efficient use of resources.

**Regarding claim 2:**

Zur teaches a system for management of multiple imaging services within a networked system (Zur, Fig. 1) which could be part of a (Zur, col. 4, line 38) Picture Archiving and Communication System (PACS). The imaging facility has (Zur, col. 4, lines 53-54) "internet connectivity...via a network connection." where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). Allison disclosed:

-instructing the server to install at least one software update to the plurality of workstations.

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(Allison, col. 12, lines 32-34, "...the launcher (18) installs the test software, configures the environment...and starts the test software.")

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zur's networked Picture Archiving Communication System with software updates, as disclosed by Allison, because a server installation process minimizes human intervention, reducing costs and errors.

**Regarding claim 3:**

Zur teaches a system for management of multiple imaging services within a networked system (Zur, Fig. 1) which could be part of a (Zur, col. 4, line 38) Picture Archiving and Communication System (PACS). The imaging facility has (Zur, col. 4, lines 53-54) "internet connectivity...via a network connection." where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). Allison disclosed:

-logging on to a web server and authenticating a user. (Allison, col. 8, lines 8-9, "components...and the users...communicate via the Internet." Also col. 11, lines 33-36, "...each installer contains a list of the dispatchers with which it can communicate. Each installer will also contain a list of the test machines which it is allowed to configure and/or install.")

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zur's networked Picture Archiving Communication System with log-

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ons and authentication, as disclosed by Allison, because this is a well known technique to verify permissions to networked clients.

**Regarding claim 4:**

Zur teaches a system for management of multiple imaging services within a networked system (Zur, Fig. 1) which could be part of a (Zur, col. 4, line 38) Picture Archiving and Communication System (PACS). The imaging facility has (Zur, col. 4, lines 53-54) "internet connectivity...via a network connection." where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). Allison disclosed:

-sending an indication message to the remote terminal to indicate whether the software installation was successful. (Allison, col. 4, lines 12 – 15, "When the launcher program is installed, the launcher program will notify all of the dispatcher machines with which it is allowed to communicate that the test machine is on the system.")

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zur's networked Picture Archiving Communication System with a successful install message, as disclosed by Allison, because this is a well known verification technique.

**Regarding claim 11:**



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Zur disclosed:

-a remote first terminal in communication with a web-based server via an Internet connection, said remote first terminal remotely monitoring a picture archiving and communication system workstation (Zur: Col. 2, lines 49-54, "system may communicate with the service center vial an Internet communication technology...communicates with the service center by electronic polling (remote monitoring)."

Zur fails to teach, "to generate a remote signal requesting installation of software in response to an error reported by the workstation". However Kobata disclosed monitoring remote clients to detect error conditions. Kobata disclosed (col. 2, lines 42-44) "infrastructure data is sensed at the client side and reported to the server...". Kobata, col. 2, lines 36-37, "information is analyzed and appropriate corrective measures are transmitted back to the client."

Zur disclosed:

-a plurality of picture archiving and communication system workstations connected to said web-based server; (Zur, fig. 1, #SYS-1-N, & col. 4, lines 37-38, "...may be part of a Picture Archiving and Communication System...")

Zur teaches a networked PACS apparatus, but fails to disclose simultaneous installation of software. However, Allison disclosed the feature of a simultaneous installation:

-said web-based server comprising an installer for simultaneously installing software to said plurality of picture archiving and communication system workstations responsive to said remote signal. (Allison: Col. 4, lines 43-46, "...installing...simultaneously...")

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur's Picture Archiving Communication workstation environment to include the simultaneous

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installation as provided by Allison, and further to provide that the update installation in response to an error condition reported by the client (workstation), as disclosed by Kobata. This is well known in the art. Monitoring remote workstations for error conditions, reporting such data, and correcting remotely is an efficient use of resources.

**Regarding claim 12:**

Zur teaches a networked PACS apparatus, but fails to disclose details regarding the installation of software, “first workstation generates the remote signal for instructing said web-based server to install software to said plurality of workstations.” Kobata disclosed a client generating signals to a server (col. 2, lines 39-40) “transmission back to the server of ...demography (error indicators).” – which lead to the server delivering updated software. Allison disclosed a simultaneous update to clients (col. 4, lines 45-46).

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur’s Picture Archiving Communication workstation environment to include the simultaneous installation as provided by Allison, and further to provide that the update installation in response to an error condition detected, as disclosed by Kobata. This is well known in the art. Monitoring remote workstations for error corrections and correcting remotely is an efficient use of resources.

**Regarding claim 13:**

-web-based server comprises an installer for simultaneously installing software updates for pre-existing software to said plurality of picture archiving and communication system workstations.

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Zur teaches networked PACS apparatus. Zur fails to teach simultaneous installation. Allison teaches simultaneous installation and installs operating systems (software updates) according to test requirements. Allison: col. 11, lines 45 – 67, "...the installer receives a request from a dispatcher to configure or install..., the installer will send commands over the Internet...the command is received...installer and the test machine will communicate back and forth...The script then causes the OS (software) to be installed on the selected test machine..." Neither Zur, nor Allison specifically teach updating pre-existing software, however, Kobata disclosed (col. 2, lines 7-10), "...ascertain the particular problem, new software can be automatically downloaded to the client to fix the client's problem (update)..."

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur's Picture Archiving Communication workstation environment to include the simultaneous installation as provided by Allison, and further to provide an update installation in response to an error condition detected, as disclosed by Kobata. This is well known in the art. Monitoring remote workstations for error corrections and correcting remotely is an efficient use of resources.

**Regarding claim 19:**

Zur disclosed:

-connecting to a web-based server from a remote terminal on the Internet; (Zur, col. 2, lines 50-51, "the metering system may communicate with the service center via an Internet communication technology...".)

Zur teaches a system for management of multiple imaging services within a networked system which could be part of a Picture Archiving and Communication System (PACS). The

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imaging facility has "internet connectivity...via a network connection." where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). Allison does not specify that the software installation could be an update to pre-existing software. However, Kobata disclosed an Internet based client / server application that detects errors at the client terminals and applies software updates to provide corrections. Kobata disclosed:

- instructing the web-based server to update pre-existing software on a plurality of picture archiving and communication system workstations in communication with the web-based server;

(Kobata, col. 2, lines 8-9, "new software can be automatically downloaded to the client to fix the client's problem...")

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur's Picture Archiving Communication workstation environment to include the simultaneous installation as provided by Allison, and further to provide an update installation to pre-existing software, in response to a detected error, as disclosed by Kobata, because updating software is an efficient use of resources, while keeping applications correct.

Zur teaches a system for management of multiple imaging services within a networked system which could be part of a Picture Archiving and Communication System (PACS). The imaging facility has "internet connectivity...via a network connection." where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach a method to simultaneously install software to a plurality of

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PACS workstations. However, Allison does teach a method for automatic simultaneous installation on a plurality of machines (terminal / workstations / clients). Allison disclosed: -simultaneously updating said pre-existing software on the plurality of picture archiving and communication system workstations. (Allison, col. 4, lines 43-46, "...installer...is capable of ...installing...simultaneously.")

Therefore, it would have been obvious to one of ordinary skill in the art, to have modified Zur's Picture Archiving Communication workstation environment to include the simultaneous installation as provided by Allison, and further to provide that the update installation to pre-existing software, as disclosed by Kobata. This is well known in the art. Monitoring remote workstations for error corrections and correcting remotely is an efficient use of resources.

**Regarding claim 20:**

Zur disclosed:

-logging on to the web-based server and authenticating a user. (Zur, col. 6, lines 45-46, "...may necessitate...password or code.")

6. **Claims 5-10 and 14-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,178,225 to Zur et al, in view of US Patent 6,321,348 B1 to Kobata.

Zur teaches a system for management of multiple imaging services within a networked system (Zur, Fig. 1) which could be part of a (Zur, col. 4, line 38) Picture Archiving and Communication System (PACS). The imaging facility has (Zur, col. 4, lines 53-54) "internet

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connectivity...via a network connection.” where signals are communicated between the service center (server) and the metering systems, SYS1-N, (plurality of clients). Zur does not teach identifying an error occurring on the workstations based on said error indicator and updating software stored on the workstations to correct said error. However, Kobata does teach error detection and software updates.

**Regarding claim 5:**

Zur disclosed:

-establishing a network connection with a web-based server; from a remote terminal;

(Zur, col. 2, lines 50-51, “...communicate with the service center via an Internet communication technology...”)

-directing the web-based server to retrieve data from at least one file from at least one of a plurality of picture archiving and communication system workstations in communication with the web-based server, the data including a log containing an error indicator;

(Zur, fig. 3 and col. 1, lines 59-61, “...the method for management of X-ray imaging...includes an archiving step wherein a generated...image is retrievably stored...” and col. 2, lines 15-24, “...method for management...includes...preparing a statistical report (log)...statistical report may include periodic data ...or other data considered relevant to the service center...”)

-retrieving the data from the at least one file; (Zur, col. 5, lines 61-62, “...images are forwarded to an archive for storage and subsequent retrieval...”)

-transmitting the data to a remote terminal; (Zur, col. 1, lines 63-64, “...archiving step includes transferring the generated digital image to a remote archive.”)

Zur failed to disclose information regarding error detection / correction. However, Kobata disclosed:

- log containing an error indicator; (See Kobata, col. 3, lines 50-59, for examples of types of log error indicators sent from the client to the server.)

- identifying an error occurring at at least one of said plurality of picture archiving and communication system workstations based on said error indicator in said data; (Kobata: col. 4, lines 5-10, "expert system...can remotely identify problems...remotely identify solutions...")

- updating software stored on at least one of said plurality of picture archiving and communication system workstations to correct said error. (Kobata: col. 4, lines 5-10, "expert system...can ...remotely fix problems...remotely install software...")

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur's Picture Archiving Communication system to accommodate error detection / correction, as disclosed by Kobata because these features make a networked system more adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 6:**

Zur disclosed:

- extracting the at least one file for analysis at the remote terminal. (Zur, col. 4, lines 34-37, "After the technologist has viewed the image (file), the image may be exported from operating

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and viewing station and stored at a local archive where it is retrieved (extracting) for diagnostics.”)

**Regarding claim 7:**

Zur provided a PACs environment. Zur disclosed the collection of a client statistical report (col. 2, lines 13-24). Zur failed to provide detailed information regarding the client log file. However, Kobata disclosed a client log file that is analyzed to identify problems (col. 4, line 6). Kobata disclosed:

-extracting at least one log file. (Kobata: Col. 3, lines 50-62, “Referring now to FIG. 2, the infrastructure data (log file) which is analyzable from the client is shown to include...Having this type of information at the server side permits either an expert or artificial intelligence analysis of a particular client’s PC...”

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur’s Picture Archiving Communication system to accommodate error detection / correction through the use of a log file, as disclosed by Kobata because these features make a networked system more adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 8:**

Zur disclosed:



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-extracting at least one image file. (Zur, col. 4, lines 34-37, "After the technologist has viewed the image (image file), the image may be exported from operating and viewing station and stored at a local archive where it is retrieved (extracting) for diagnostics.")

**Regarding claim 9:**

Zur provided a PACs environment. Zur disclosed the collection of a client statistical report (col. 2, lines 13-24). Zur failed to provide detailed information regarding the client log file. However, Kobata disclosed a client log file that is analyzed to identify problems (col. 4, line 6 and col. 3, lines 50-59). Kobata disclosed:

-directing a search of files for a predetermined message in at least one of the plurality of workstations and said retrieving step comprises retrieving files that include said predetermined message.

(Kobata: col. 3, line 50 – col. 4, line 10, "...infrastructure data which is analyzable from the client...to include such things as IP address (predetermined message), CPU information (predetermined message), hard disk space (predetermined message), network connection (predetermined message), a list of inventories or application (predetermined message), peripherals such as sound cards and the log-in history. Also, that which is available is the serial number of the software (predetermined message) which has been provided to the client which provides a unique ID (predetermined message) of the client software, the provider's ID, the date delivered and route of delivery...server side permits...analysis..." Data (files retrieved with predetermined messages) is sent by the client to a server. See col. 2, lines 34-37, "...provide this information to an artificial intelligence or expert type consulting system in which the information

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is analyzed and appropriate corrective measures are transmitted back to the client.” The data retrieved by the server is analyzed for error conditions, whereby corrective action is provided (col. 2, lines 50-51) “through the automatic transmission of new software over the internet to the client.”)

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur’s Picture Archiving Communication system to accommodate error detection / correction through retrieving a predetermined message from remote workstations / clients, as disclosed by Kobata because these features make a networked system more adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 10:**

Zur provided a PACs environment. Zur disclosed the collection of a client statistical report (col. 2, lines 13-24). Zur failed to provide detailed information regarding the collection of data indicating errors from a client. However, Kobata disclosed more details regarding detecting errors at a client. Kobata disclosed:

-directing a search of files for an error indicator in at least one of the plurality of workstations, and said retrieving step comprises retrieving files that include said error indicator.

(Kobata: Col. 3, lines 50-59 – files that include said error indicator- Col. 3, lines 60-063, “server side permits...analysis (directing a search of files for error indicator) of a particular client’s PC.”)

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Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur's Picture Archiving Communication system to search files for an error indicator as disclosed by Kobata because these features make a networked system more adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 14:**

Zur disclosed:

- a remote first terminal in communication with a web-based server via a network connection, said remote first terminal comprising a remote signal; (Zur, fig. 1. & 3, col. 2, lines 47-55; "...metering system (first terminal, SYS-1) is operative to communicate with the service center (web-based server) via a communications network...by electronic polling (remote signal.)
- a plurality of picture archiving and communication system workstations connected to said web-based server; (Zur, figs. 1 & 3, SYS1-N, col. 3, line 27, "...at least one digital X-ray imaging facility (10)." Also col. 4, lines 53-54, "...imaging facility has internet connectivity...via a network connection.")
- said web-based server comprising a data retriever for retrieving data from at least one of said plurality of picture archiving and communication system workstations responsive to said remote signal. (Zur, col. 5, lines 61-62, "...images are forwarded to an archive for storage and subsequent retrieval..." and col. 6, lines 43-45, "service center (server) may electronically poll individual...imaging facilities to...update...statistics.")

Zur failed to disclose a signal generated in response to an error and providing remote identification and correction of an error. However, Kobata disclosed:

-remote signal generated in response to an error detected by a picture archiving and communication system workstation...

(Kobata: col. 2, lines 42-44, "infrastructure data is sensed (detect error signal) at the client side and reported to the server periodically..."

-server providing remote identification and correction of an error at at least one...workstation by updating software stored on at least one...workstation. (Kobata: col. 2, lines 8-10, "...ascertain the particular problem, new software can be automatically downloaded to the client...")

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur's Picture Archiving Communication system to provide an error indicator and update correction, as disclosed by Kobata because these features make a networked system more adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 15:**

Zur provided a PACs environment. Zur disclosed the collection of a client statistical report (col. 2, lines 13-24). Zur failed to provide detailed information regarding the client log file. However, Kobata disclosed a client log file that is analyzed to identify problems (col. 4, line 6). Kobata disclosed:

-said web-based server comprises said data retriever for retrieving log files from at least one of said plurality of picture archiving and communication system workstations responsive to said

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remote signal. (Kobata: Col. 2, lines 31-34, “system detects the demographics of a client including...applications installed, network connectivity and log-in history (retrieving log files) so as to provide this information to an artificial intelligence or expert type consulting system (at the server)...”)

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur’s Picture Archiving Communication system to accommodate the retrieval of log files for the purpose error detection / correction, as disclosed by Kobata because these features make a networked system more automatic and adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

**Regarding claim 16:**

Zur disclosed:

-data retriever for retrieving image files from at least one of said plurality of PACS workstations responsive to said remote signal. (Zur, col. 4, lines 34-37, “After the technologist has viewed the image (image file), the image may be exported from operating and viewing station and stored at a local archive where it is retrieved (extracting) for diagnostics.”)

**Regarding claim 17:**

Zur disclosed:

-connecting to a web-based server on a network; (Zur, col. 2, lines 50-51, “...communicate with the service center via an Internet communication technology...”)

Zur provided a PACs environment. Zur disclosed the collection of a client statistical report (col. 2, lines 13-24). Zur failed to provide detailed information regarding the client log file and analysis. However, Kobata disclosed a client log file that is analyzed to identify problems (col. 4, line 6). Kobata disclosed:

-instructing the web-based server to extract log data from each of a plurality of picture archiving and communication system workstations in communication with the web-based server; (Kobata: Col. 4, lines 11-13, "The database information of the infrastructure (analyzable data from clients) of all the clients can also be used by the consultant group to remotely identify potential customers..." Also, lines 15-17, "The system can not only identify a particular client's problems..." The system extracts information sent from the client to the server, which may indicate error conditions.

-transmitting the log data to a remote terminal for analysis of the error; (Kobata: col. 3, lines 60-62, "server side permits either an expert or artificial intelligence analysis of a particular client's PC (workstation)")

-remotely correcting the error at the...workstations from a remote terminal using the web-based server. (Kobata: Col. 4, line 29, "...remotely fixing the problems...")

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Zur's Picture Archiving Communication system to accommodate the retrieval of client workstation data for the purpose error detection / correction, as disclosed by Kobata because these features make a networked system more automatic and adaptable, by handling problems / creating solutions in an automatic manner. Remote error detection / correction in networked systems is well known in the art.

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**Regarding claim 18:**

Zur disclosed:

-extracting at least one image file from at least one of the plurality of picture archiving and communication system workstations. (Zur, col. 4, lines 34-37, "After the technologist has viewed the image (image file), the image may be exported from operating and viewing station and stored at a local archive where it is retrieved (extracting) for diagnostics.")

***Response to Arguments***

7. Applicant's argument's filed on 22 November 2002 have been fully considered but they are not persuasive.

8. Applicant has argued, in substance, the following:

(A) As Applicant has noted on page 11, 1<sup>st</sup> paragraph of Amendment dated 25 June 2004, "One of ordinary skill in the art would not have combined the teachings of Zur, Allison, and Kobata in pursuit of the claimed invention."

Examiner's Response:

Zur (col. 1, lines 6-8) "relates to systems and methods for **management** of X-ray imaging facilities **and services**, specifically digital X-ray imaging facilities...(col. 1, lines 44-45) services **including the steps of installing...**" (emphasis added)

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There is motivation to install software (specifically picture archiving system) simultaneously on networked computers by combining the references of Zur and Allison, as Zur shows networked workstations running picture archiving software. A simultaneous install is a cost and time efficient method of managing networks. Zur does mention that system costs are a consideration (col. 1, lines 33-34).

Allison provides for an automatic, simultaneous installation of software on a plurality of clients. Allison noted (col. 1, lines 41-45) "the need exists for a method and apparatus for automatically installing...which does not require human involvement and which is capable of automatically installing...on large numbers of computers."

Kobata disclosed (col. 1, lines 11-14), "This invention relates to the provision of data over the Internet...to provide appropriate software...based on the user's infrastructure data."

Kobata noted (col. 1, line 43) "installation problems" which occur most frequently..."

Extracting / analyzing data for error conditions, and as such the Kobata reference provides these features and reduces installation problems.

Thus all references relate to installing software over the Internet. Management and services are provided to automatically install. Time and cost efficiency considerations and reduced installation problems are provided.

(B) As Applicant has noted on page 11, 3<sup>rd</sup> paragraph through page 12, 1<sup>st</sup> paragraph, regarding independent claim 1, the combined art does not teach "a method for remotely enhancing a picture archiving and communication system (PACS) including establishing a network connection with a web-based server and periodically providing software for installation to a plurality of PACS



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workstations in response to an error detected at one or more of the workstations"... "directing the web-based server to simultaneously install the software to the plurality of PACS workstations and simultaneously installing the software."

Examiner's Response:

See response to claim 1 above.

Simultaneous installation is taught by the combination of Zur (picture archiving communication system), networked (see Zur, fig. 1, items 16, 21, and sys-1 – sys-n.) as modified by a generic simultaneous install system as taught by Allison. It would have been obvious to use a simultaneous installation on a specific system (workstations using picture archiving software.)

The Kobata reference provides the features of software updates, log files and error detection / correction.

(C) As Applicant has noted on page 12, 3<sup>rd</sup> paragraph, regarding independent claim 11, the combined art does not teach or suggest "a system with a remote first terminal remotely monitoring a PACS workstation to generate a remote signal requesting installation of software in response to an error at the workstation and a web-based server including an installer for simultaneously installing software to a plurality of PACS workstations responsive to the remote signal."

Examiner's Response:

See response to claim 11 above.

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Simultaneous installation is taught by the combination of Zur (picture archiving communication system), networked (see Zur, fig. 1, items 16, 21, and sys-1 – sys-n.) as modified by a generic simultaneous install system as taught by Allison. It would have been obvious to use a simultaneous installation on a specific system (workstations using picture archiving software.).

The Kobata reference provides the features of software updates, log files and error detection / correction. Kobata collects user information and reports to a server. Server analyzes the data for errors and provides corrective measures by downloading software to the client over the Internet.

(D) As Applicant has noted on page 13, 1st paragraph, regarding claim 12, the combined art does not teach or suggest “generating a remote signal at a first PACS workstation for instructing the web-based server to install software at other PACS workstations on the same system.”

Examiner's Response:

See response to claim 12 above.

Kobata collects data from the client and reports to the Server. The Server installs software at the client to correct error conditions.

(E) As Applicant has noted on page 13, 3<sup>rd</sup> paragraph, regarding independent claim 19, the combined art does not teach or suggest “connecting to a web-based server from a remote terminal on the Internet, instructing the web-based server to update pre-existing software on a plurality of PACS workstations in communication with the web-based server, and simultaneously updating the pre-existing software on the plurality of PACS workstations.”

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Examiner's Response:

See response to claim 19 above.

Simultaneous installation is taught by the combination of Zur (picture archiving communication system), networked (see Zur, fig. 1, items 16, 21, and sys-1 – sys-n.) as modified by a generic simultaneous install system as taught by Allison. It would have been obvious to use a simultaneous installation on a specific system (workstations using picture archiving software.)

(F) As Applicant has noted on page 14, 2nd paragraph, regarding independent claim 5, the combined art does not teach or suggest “identifying an error occurring at one or more PACS workstations based on an error indicator retrieved from one or more files at one or more PACS workstations at a remote terminal in communication with a web-based server”... “directing updates of special-purpose medical imaging software from a remote terminal.”

Examiner's Response:

See response to claim 5 above.

The Kobata reference provides the features of software updates, log files and error detection / correction. Kobata collects client information. The server retrieves the data. The server provides corrective measures by downloading software to the remote client.

(G) As Applicant has noted on page 14, 3<sup>rd</sup> paragraph, regarding independent claim 14, the combined art does not teach or suggest “generating a remote signal at a remote terminal in

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response to an error occurring at a PACS workstation connected to a web-based server, retrieving data from one or more PACS workstations in response to the remote signal, and providing remote identification and correction of an error via the web-based server at one or more PACS workstations by updating software stored on one or more PACS workstations.”

Kobata does not disclose a method for updating multiple clients...rather it downloads software to one specific client...”

Examiner's Response”

See rejection of claim 14 above.

The Kobata reference is not used for “updating multiple clients”. Simultaneous installation is taught by the combination of Zur (picture archiving communication system), networked (see Zur, fig. 1, items 16, 21, and sys-1 – sys-n.) as modified by a generic simultaneous install system as taught by Allison. It would have been obvious to use a simultaneous installation on a specific system (workstations using picture archiving software.)

The Kobata reference provides the features of software updates, log files and error detection / correction. Kobata collects client data. The data is sent to the server. Analysis at the server detects the error condition. Corrective measures are taken by downloading software to the client.

(G) As Applicant has noted on page 15, 2nd paragraph, regarding independent claim 17, the combined art does not teach or suggest “remote analysis of log data from each of a plurality of PACS workstations in communication with a web-based server to indicate an error at the

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plurality of PACS workstations and remote correction of the error at the plurality of PACS workstations from a remote terminal using the web-based server.”

Examiner's Response:

See rejection of claim 17 above.

Zur disclosed PACS workstations in communication with a server.

The Kobata reference provides the features of software updates, log files and error detection / correction.

Examiner maintains the rejection of claims 1-20.

PACS networked systems and medical imaging systems are well known in the art. Simultaneous updates to remote client workstations are well known in the art. Monitoring client workstations for errors, logging errors, and notification are well known in the art.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,226,784 to Holmes et al., (Monitoring software system and delivery schedule for distribution of software.)

U.S. Pat. No. 6,223,345 to Jones et al., (Client package build engine.)

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

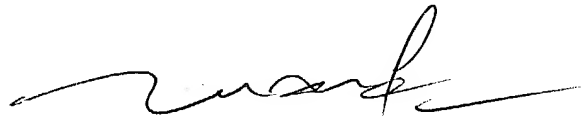
After October 25, 2004, examiner can be reached at new telephone number (571) 272-3704. Supervisor, Tuan Q. Dam can be reached at (571) 272-3694.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

09/08/2004



TUAN DAM  
SUPERVISORY PATENT EXAMINER